## AMENDMENTS TO THE CLAIMS

Please cancel claim 11 without prejudice or disclaimer, add new claims 19-21 and amend the claims as shown below.

1. (Currently Amended) A method for accelerating the rate of mucociliary clearance in a subject in need of such treatment comprising administering to the subject an effective mucociliary clearance stimulatory amount of a composition comprising a Kunitz-type serine protease inhibitor and a physiologically acceptable carrier, wherein the Kunitz-type serine protease inhibitor is comprises an amino acid sequence selected from the group consisting of:

MAQLCGL	RRSRAFLALL	G\$LLĽŠ <b>GVLA</b>	1	
ADRERSIHDF CLVSKVVGRC RASMPRWWYN	VTDGSCQLFV	YGGCDGNSNN	50	
YLTKEECLKK CATVTENATG DLATSRNAAD	SSVPSAPRRQ	DSEDHSSDMF	100	
NYEEYCTANA VTGPCRASFP RWYFDVERNS	CNNFIYGGCR	GNKNSYRSEE	150	
ACMLRCFRQQ ENPPLPLGSK VVVLAGLFVM	VLILFĻGASM	VYLIRVARRN	200	
QERALRTVWS SGDDKEQLVK NTYVL		•	225	
(SEQ ID NO:49);	-			
	agsflawl	GSLLLSGVLA	-1	
ADRERSIHDF CLVSKVVGRC RASMPRWWYN	VTDGSCQLFV	YGGCDGNSNN	50	
YLTKEECLKK CATVTENATG DLATSRNAAD	SSVPSAPRRQ	DSEDHSSDMF	100	
NYEEYCTANA VTGPCRASFP RWYFDVERNS	CNNFIYGGCR	GNKNSYRSEE	150	
ACMLRCFRQQ ENPPLPLGSK VVVLAGAVS			179	
(SEQ ID NO:2);				
MLR	AEADGVSRLL	GSLLLSGVLA	-1	
ADRERSIHDF CLVSKVVGRC RASMPRWWYN	VTDGSCQLFV	YGGCDGNSNN	50	
YLTKEECLKK CATVTENATG DLATSRNAAD	SSVPSAPRRQ	DSEDHSSDMF	100	
NYEEYCTANA VTGPCRASFP RWYFDVERNS	CNNFIYGGCR	GNKNSYRSEE	150	
ACMLRCFRQQ ENPPLPLGSK VVVLAGLFVM	VLILFLGASM	VYLIRVARRN	200	
QERALRIVWS SGDDKEQLVK NTYVL			225	

(SEQ ID NO:45);

MAQLCGL RRSRAFLALL GSLLLSGVLA	-1
ADRERSIHDF CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN	50
YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF	100
NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE	150
ACMLRCFRQQ ENPPLPLGSK VVVLAGLFVM VLILFLGASM VYLIRVARRN	200
QERALRTVWS FGD	213
(SEQ ID NO:47);	
ADRERSIHDF CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN	. 50
YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF	100
NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE	150
ACMLRCFRQQ ENPPLPLGSK VVVLAGLFVM VLILFLGASM VYLIRVARRN	200
QERALRTVWS SGDDKEQLVK NTYVL	225
(SEQ ID NO:71);	
÷ -	
ADRERSIHDF CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN	50
YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF	100
NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE	150
ACMLRCFRQQ ENPPLPLGSK VVVLAGLFVM VLILFLGASM VYLIRVARRN	200
QERALRIVWS FGD	213
(SEQ ID NO:70);	
IHDF CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN	50
YLTKEECLKK CATV	64
(SEQ ID NO:4);	
CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN	50
YLTKEECLKK . C	61
(SEQ ID NO:5);	

: YEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE	150
ACMLRCFRQ	159
	100
(SEQ ID NO:6);	
CONTRACTOR OF DEPENDING CONTRACTOR CONTRACTOR	150
CTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE	150
ACMLRC	156
(SEQ ID NO:7);	
·	·
IHDF CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN	50
YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF	100
NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE	. 150
ACMLRCFRQ	159
(SEQ ID NO:3);	
CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN	50
YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF	100
NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE	150
ACMLRC	156
(SEQ ID NO:50);	
ADRERSIHDF CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN	50
YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRO DSEDHSSDMF	100
NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE	150
ACMLRCFRQQ ENPPLPLGSK VVVLAGAVS	179
(SEQ ID NO:1);	
ADRERSIHDF CLVSKVVGRC RASMPRWWYN VIDGSCQLFV YGGCDGNSNN	50
YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF	100
NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE	150
ACMLRCFRQQ ENPPLPLGSK	170
(SEQ ID NO:52); and	

ADRERSIHDF CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN 50
YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DS 92
(SEQ ID NO:8).

- 2. (Original) The method according to claim 1, wherein the composition is administered to the lung airways.
- 3. (Original) The method according to claim 1, wherein said composition is administered directly by aerosolization.
- 4. (Original) The method according to claim 1, wherein said composition is administered directly as an aerosol suspension into the mammal's respiratory tract.
- 5. (Original) The method according to claim 4, wherein said aerosol suspension includes respirable particles ranging in size from about 1 to about 10 microns.
- 6. (Original) The method according to claim 4, wherein said aerosol suspension includes respirable particles ranging in size from about 1 to about 5 microns.
- 7. (Original) The method according to claim 4, wherein said aerosol suspension is delivered to said subject by a pressure driven nebulizer.
- 8. (Original) The method according to claim 4, wherein said aerosol suspension is delivered to said subject by an ultrasonic nebulizer.
- (Original) The method according to claim 4, wherein said aerosol suspension is delivered to said subject by a non-toxic propellant.
- 10. (Original) The method according to claim 1, wherein said carrier is a member selected from the group consisting of a physiologically buffered solution, an isotonic saline, normal saline, and combinations thereof.

- 11. (Currently cancelled) The method according to claim 1 wherein the Kunitz-type serine protease inhibitor is aprotinin.
- 12. (Previously cancelled) The method according to claim 1, wherein the Kunitz-type serine protease inhibitor comprises the amino acid sequence:
- MAQLCGL RRSRAFLALL GSLLLSGVLA -1
  ADRERSIHDF CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN 50
  YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100
  NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150
  ACMLRCFRQQ ENPPLPLGSK VVVLAGLFVM VLILFLGASM VYLIRVARRN 200
  QERALRTVWS SGDDKEQLVK NTYVL 225
  (SEQ ID NO: 49).
- 13. (Previously cancelled) The method according to claim 1, wherein the Kunitz-type serine protease inhibitor comprises the amino acid sequence:
- AGSFLAWL GSLLLSGVLA -1
  ADRERSIHDF CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN 50
  YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100
  NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150
  ACMLRCFRQQ ENPPLPLGSK VVVLAGAVS 179
  (SEQ ID NO.: 2),
- MLR AEADGVSRLL GSLLLSGVLA -1
  ADRERSIHDF CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN 50
  YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100
  NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150
  ACMLRCFRQQ ENPPLPLGSK VVVLAGLFVM VLILFLGASM VYLIRVARRN 200
  QERALRTVWS SGDDKEQLVK NTYVL 225
  (SEQ ID NO.: 45),
- MAQLCGL RRSRAFLALL GSLLLSGVLA -1
  ADRERSIHDF CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN 50
  YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100
  NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150

ACMLRCFRQQ	ENPPLPLGSK	VVVLAGLFVM	VLILFLGASM	VYLIRVARRN	200
QERALRTVWS	FGD				213
(SEQ ID NO.	.: 47),				
ADRERSIHDF	CLVSKVVGRC	RASMPRWWYN	${\tt VTDGSCQLFV}$	YGGCDGNSNN	50
YLTKEECLKK	CATVTENATG	DLATSRNAAD	SSVPSAPRRQ	DSEDHSSDMF	100
NYEEYCTANA	VTGPCRASFP	RWYFDVERNS	CNNFIYGGCR	GNKNSYRSEE	150
ACMLRCFRQQ	ENPPLPLGSK	VVVLAGLFVM	VLILFLGASM	VYLIRVARRN	200
QERALRIVWS	SGDDKEQLVK	NTYVL			225
(SEQ ID NO	.: 70),	•			

and

ADRERSIHDF CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100 NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150 ACMLRCFRQQ ENPPLPLGSK VVVLAGLFVM VLILFLGASM VYLIRVARRN 200 213 QERALRIVWS FGD (SEQ ID NO.: 71).

14. (Previously cancelled) The method according to claim 1, wherein the Kunitz-type serine protease inhibitor comprises the amino acid sequence:

IHDF CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN 50 64 YLTKEEČLKK CATV (SEQ ID No.: 4), CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN 50 61 YLTKEECLKK C (SEQ ID NO.: 5),

YEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150 159 ACMLRCFRQ (SEQ ID NO.: 6),

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RASFPRWYFD	VERNSCNNFI	YGGCRGNKNS	YRSEE 150		
			156		
.: 7),					
VVGRC RASMPF	NEDGEO NEWWYN	CQLFV YGGCDO	NRNS	50	
				75	
VTGPCRASFP	RWYFDVERNS	CNNFIYGGCR	GNKNSYRSEE	125	
				159	
.; 3),					
RASMPRWWYN	VTDGSCQLFV	YGGCDGNSNN		50	
CATVTENATG	DLATSRNAAD	SSVPSAPRRQ	DSEDHSSDMF	100	
VTGPCRASFP	RWYFDVERNS	CNNFIYGGCR	GNKNSYRSEE	150	
e				156	
.: 50),			-		
CLVSKVVGRC	RASMPRWWYN	VTDGSCQLFV	YGGCDGNSNN	25	
CATVTENATG	DLATSRNAAD	SSVPSAPRRQ	DSEDHSSDMF	<b>7</b> 5	
VTGPCRASFP	RWYFDVERNS	CNNFIYGGCR	GNKNSYRSEE	125	
ENPPLPLGSK	VVVLAGAVS			179	
).: 1),		•			
•					
CLVSKVVGRC	RASMPRWWYN	VTDGSCQLFV	YGGCDGNSNN	50	
VTGPCRASFP	RWYFDVERNS	CNNFIYGGCR	GNKNSYRSEE	150	
ENPPLPLGSK	· -			170	
).: 52).					
•					
ntly Amended) T	he method accor	ding to claim 1,	wherein the Kun	itz-type	serine
itor <u>is</u> <del>comprises</del>	the amino acid-s	e <del>quence</del> :			
CLVSKVVGRC	RASMPRWWYN	VTDGSCQLFV	YGGCDGNSNN	•	5 <b>0</b>
	VVGRC RASMPF CATVTENATG VTGPCRASFP  : 3),  RASMPRWWYN CATVTENATG VTGPCRASFP : 50),  CLVSKVVGRC CATVTENATG VTGPCRASFP ENPPLPLGSK : 1),  CLVSKVVGRC CATVTENATG VTGPCRASFP ENPPLPLGSK : 52).  Intly Amended) Telegion is comprises	VVGRC RASMPRWWYN VTDGSC CATVTENATG DLATSRNAAD VTGPCRASFP RWYFDVERNS  : 3),  RASMPRWWYN VTDGSCQLFV CATVTENATG DLATSRNAAD VTGPCRASFP RWYFDVERNS  : 50),  CLVSKVVGRC RASMPRWWYN CATVTENATG DLATSRNAAD VTGPCRASFP RWYFDVERNS ENPPLPLGSK VVVLAGAVS  : 1),  CLVSKVVGRC RASMPRWWYN CATVTENATG DLATSRNAAD VTGPCRASFP RWYFDVERNS CENPPLPLGSK  : 1),  CLVSKVVGRC RASMPRWWYN CATVTENATG DLATSRNAAD VTGPCRASFP RWYFDVERNS ENPPLPLGSK  : 52).  Intly Amended) The method accorditor is comprises the amino acid s	VUGRC RASMPRWWYN VTDGSCQLFV YGGCDC CATVTENATG DLATSRNAAD SSVPSAPRRQ VTGPCRASFP RWYFDVERNS CNNFIYGGCR  RASMPRWWYN VTDGSCQLFV YGGCDGNSNN CATVTENATG DLATSRNAAD SSVPSAPRRQ VTGPCRASFP RWYFDVERNS CNNFIYGGCR  CATVTENATG DLATSRNAAD SSVPSAPRRQ CATVTENATG DLATSRNAAD SSVPSAPRRQ VTGPCRASFP RWYFDVERNS CNNFIYGGCR CATVTENATG DLATSRNAAD SSVPSAPRRQ PENPPLPLGSK VVVLAGAVS TO CLVSKVVGRC RASMPRWWYN VTDGSCQLFV CATVTENATG DLATSRNAAD SSVPSAPRRQ CHPPLPLGSK CATVTENATG DLATSRNAAD SSVPSAPRQ CHPPLPLGSK CATVTENATG DLATSRNAAD SSVPSAPRQ CHPPLPLATG DLATSRNAAD SSVPSAPRQ CHPPLPLATG DLATSRNAAD SSVPSAPRQ CHPPLPLATG DLATSRNAAD SSVPSAPRQ CHPPLPLAT	VVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE  : 3),  RASMPRWWYN VTDGSCQLFV YGGCDGNSNN CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE  : 50),  CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE ENPPLPLGSK VVVLAGAVS  : 1),  CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE ENPPLPLGSK  : 52).  Intly Amended) The method according to claim 1, wherein the Kun itor is comprises the amino acid sequence:	VVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN 50 CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 75 VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 125 .: 3),  RASMPRWWYN VTDGSCQLFV YGGCDGNSNN 50 CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100 VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150 .: 50),  CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN 25 CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 75 CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 75 CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 75 ENPPLPLGSK VVVLAGAVS 179 .: 1),  CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN 50 CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 179 .: 1),  CLVSKVVGRC RASMPRWWYN VTDGSCQLFV YGGCDGNSNN 50 CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100 VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150 LVTGPCRASFP RWYFDVE

YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DS

(SEQ ID NO:8)

provided that the Kunitz-type serine protease inhibitor does not consist of the amino acid sequence of SEQ ID NO:49 or 71.

- (Previously Amended) The method according to claim 1 or 15, wherein the Kunitz-type serine protease inhibitor is glycosylated.
- 17. (Previously Amended) The method according to claim 1 or 15, wherein the Kunitz-type serine protease inhibitor contains at least one intra-chain cysteine-cysteine disulfide bond.
- 18. (Currently Amended) The method according to claim 1 er 15, wherein the Kunitz-type serine protease inhibitor contains at least one intra-chain cysteine-cysteine disulfide bond selected from the cysteine-cysteine paired groups consisting of CYS11-CYS61, CYS20-CYS44, CYS36-CYS57, CYS106-CYS156, CYS115-CYS139, and CYS131-CYS152 for any of SEQ ID NO: 49, SEQ ID NO: 2, SEQ ID NO: 45, SEQ ID NO: 47, SEQ ID NO: 71, SEQ ID NO: 70, SEQ ID NO: 3, SEQ ID NO: 50, SEQ ID NO: 1, and SEQ ID NO: 52, wherein the cysteine residues are numbered according to the amino acid sequence of SEQ ID NO:52.
- 19. (New) The method according to claim 1, wherein the Kunitz-type serine protease inhibitor contains at least one intra-chain cysteine-cysteine disulfide bond selected from the cysteine-cysteine paired groups consisting of CYS11-CYS61, CYS20-CYS44, CYS36-CYS57, for any of SEQ ID NO: 4, SEQ ID NO: 5, and SEQ ID NO: 8, wherein the cysteine residues are numbered according to the amino acid sequence of SEQ ID NO:52.

- 20. (New) The method according to claim 1, wherein the Kunitz-type serine protease inhibitor contains at least one intra-chain cysteine-cysteine disulfide bond selected from the cysteine-cysteine paired groups consisting of CYS106-CYS156, CYS115-CYS139, and CYS131-CYS152 for any of SEQ ID NO: 6 and SEQ ID NO: 7, wherein the cysteine residues are numbered according to the amino acid sequence of SEQ ID NO:52.
- 21. (New) The method according to claim 15, wherein the Kunitz-type serine protease inhibitor contains at least one intra-chain cysteine-cysteine disulfide bond selected from the cysteine-cysteine paired groups consisting of CYS11-CYS61, CYS20-CYS44, CYS36-CYS57, wherein the cysteine residues are numbered according to the amino acid sequence of SEQ ID NO:52.